MAY 0 2 2001

<211> 22 <212> DNA

<220>

<213> Artificial Sequence

```
SEQUENCE LISTING
<110> Clendennen, Stephanie K.
      Kellogg, Jill A.
<1/20> MELON PROMOTERS FOR EXPRESSION OF
                                              DER HI
  ARANSGENES IN PLANTS
<130 4257-0025.30
<140> US 09/811,093
<141> 2001-03-16
<150> US\60/190,414
<151> 200\( \bar{\q} - 03 - 17\)
<160> 45
<170> FastSEQ for Windows Version 4.0
<210> 1
<211> 51
<212> DNA
<213> Artificial Sequence
<220>
<223> adaptor (universal genome walker)
gtaatacgac tcactatagg gacgcgtgg tggtcgacgg cccgggctgg t
<210> 2
<211> 8
<212> DNA
<213> Artificial Sequence
<220>
<223> adaptor (universal genome\walker)
<221> misc_feature
<222> (1)...(1)
<223> 5' nucleotide modified to include phosphate group
<221> misc_feature
<222> (8)...(8)
<223> 3' nucleotide modified to include amine group
<400> 2
accaqccc
<210> 3
```

51

<223> primer	
<400> 3 gtaatacgac tcactatagg gc	22
<210> 4 <211> 19 <212> DNA <213> Artificial Sequence	
<220> <223> primer	
<400> 4 actatagggc acgcgtggt	19
<210> 5 <211> 26 <212> DNA <213> Artificial Sequence	
<220> <223> primer	
<400> 5 aatttgctcc aatatcttag ctctac	26
<210> 6 <211> 26 <212> DNA <213> Artificial Sequence	
<220> <223> primer	
<400> 6 agacagccat ttcttttgt agatac	26
<210> 7 <211> 24 <212> DNA <213> Artificial Sequence	
<220> <223> primer	
<400> 7 agcggataac aatttcacac agga	24
<210> 8 <211> 32 <212> DNA <213> Artificial Sequence	
<220><223> primer	

<400> 8 tagacggatc cttcttttg tagatacaag at	32
<210> 9 <211> 22 <212> DNA <213> Artificial Sequence	
<220> <223> primer	
<400> 9 gatccattat tagagattga gc	22
<210> 10 <211> 22 <212> DNA <213> Artificial Sequence	
<220> <223> primer	
<400> 10 catggctcaa tctctaataa tg	22
<210> 11 <211> 28 <212> DNA <213> Artificial Sequence	
<220> <223> primer	
<400> 11 gggctggaaa gcttaagaga aattggta	28
<210> 12 <211> 30 <212> DNA <213> Artificial Sequence	
<220> <223> primer	
<400> 12 ggggttttgt ttttggatcc tgggtgtgtt	30
<210> 13 <211> 27 <212> DNA <213> Artificial Sequence	
<220> <223> primer	
<400> 13 ccatcctaat acgactcact atagggc	27

<210> 14 <211> 28 <212> DNA <213> Artificial Sequence	
<220> <223> primer	
<400> 14 gggcaggttt ctagaattca gcggccgc	28
<210> 15 <211> 30 <212> DNA <213> Artificial Sequence	
<220> <223> primer	
<400> 15 gtgaaactcg acccgttcct taaaaacttc	30
<210> 16 <211> 32 <212> DNA <213> Artificial Sequence	
<220> <223> primer	
<400> 16 gctttccaat gagagccatg gttttaaacc tt	32
<210> 17 <211> 27 <212> DNA <213> Artificial Sequence	·
<220> <223> primer	
<400> 17 tattaccttc actggatctc ttccctc	27
<210> 18 <211> 28 <212> DNA <213> Artificial Sequence	
<220> <223> primer	
<400> 18 gccttaagct ttgttgatca tccacatc	28
Z210\ 10	

<211> 23 <212> DNA <213> Artificial Sequence	
<220> <223> primer	
<400> 19 gtttgcattg tttccatggg aaa	23
<210> 20 <211> 24 <212> DNA <213> Artificial Sequence	
<220> <223> primer	
<400> 20 agcggataac aatttcacac agga	24
<210> 21 <211> 16 <212> DNA <213> Artificial Sequence	
<220> <223> primer	
<400> 21 aagctttttt tttttg	16
<210> 22 <211> 16 <212> DNA <213> Artificial Sequence	
<220> <223> primer	
<400> 22 aagcttttt ttttc	16
<210> 23 <211> 16 <212> DNA <213> Artificial Sequence	
<220> <223> primer	
<400> 23 aagctttttt ttttta	16
<210> 24 <211> 13 <212> DNA	

<213>	Artificial	Sequence			
<220> <223>	primer				
<400> aagctt	24 gatt gcc				13
<210> <211> <212> <213>	13	Sequence			•
<220> <223>	primer				
<400> aagctt	25 cogac tgt				13
<210> <211> <212> <213>	13	Sequence			
<220> <223>	primer				
<400> aagctt	26 tggt cag				13
<210> <211> <212> <213>	13	Sequence			
<220> <223>	primer				
<4 <u>0</u> 00> aagctt	27 cctca acg				13
<210> <211> <212> <213>	13	Sequence		·	
<220> <223>	primer				
<400> aagctt	28 agta ggc				13
<210><211><211><212><213>	13	Sequence			

<220> <223>	primer	
<400> aagctt		13
<210> <211> <212> <213>	13	
<220> <223>	primer	
<400> aagctt		13
<210> <211> <212> <213>	13	
<220> <223>	primer	
<400> aagctt		13
<210> <211> <212> <213>	28	
<220> <223>	primer	
<400> ttctag		28
<210> <211> <212> <213>	27	
<220> <223>	primer	
<400>		
cccaca	actga ccccaacaaa caatagc	27
<210>		
<211>		
<212> <213>	Artificial Sequence	
<220>	primer	
-2237	brimer brimer	

<400> 34 aggccatggt cggtgccggg aaaa	24
<210> 35 <211> 24 <212> DNA <213> Artificial Sequence	
<220> <223> primer	
<400> 35 agcggataac aatttcacac agga	24
<210> 36 <211> 26 <212> DNA <213> Artificial Sequence	
<220> <223> primer	
<400> 36 gacagtatag ttcatggctt ggttgg	26
<210> 37 <211> 27 <212> DNA <213> Artificial Sequence	
<220> <223> primer	
<400> 37 aggttctttt aatcaggcaa tcttctt	27
<210> 38 <211> 30 <212> DNA <213> Artificial Sequence	
<220> <223> primer	
<400> 38 gcgggatcct attttgtga attggaaatg	30
<210> 39 <211> 24 <212> DNA <213> Artificial Sequence	
<220> <223> primer	
<400> 39	



420

atgtatgtaa gaaacgacga aatatgtgat taaaccaaga tcgcatacaa ataagagcta

gatcctaaag atatataaaa gtatgatcaa caacgtacaa aacgtttctt ttcgatgata 480 540 attatcttaa gaacttcaag gttaatttag atctcttaat taaaaaattt catagataat 600 qcatccqtqa acaaqaaaaa acataaaqaa cccatqgttg tcctaatttt tgtagtaaat aagcgtagtt caagacacaa gtaagaatga cgttaccaca tgttaatcta gattccaaaa 660 cttgagcttg agagcacgtt acgaaaataa tctacgaaaa cgagtaagtc gtctaagttc 720 gttttcgttt atttgacacg taagatactc gtattgaaag aagacgaaaa atggaaaaaa 780 qtaaaqaaqg taaggaggtg ggtgagtcca aaggaaacat accaaattca tgcaagaact 840 atgagattca gaaattaaga gaaaagtgtg gaaatcatgt aactaaattt aaaatacata 900 960 taggtactat tttctttcct tttctattga aasraagaga nnaaggggga attagngtat atggcattgg cagacataaa aataataaag ttaaatcaaa ttgggtccca aactcaccaa 1020 1080 aqaqqaaatt caqtqttqaa taaaqccaat taqccaaagc caaagccaaa gccacctcct 1140 ctctttccca catacatqca tqaaatttca tqqqcccatt ctttttatca tcacattttt 1200 ttotttttt aatcaattto ttoccacttt ccaatootaa ataaatttoa ctataaatac 1260 cccttcatta taacttgatc caacaccc aggatccatt attagagatt gagccatgg 1319 <210> 42 <211> 1735 <212> DNA <213> Artificial Sequence <220> <223> promoter <400> 42 60 ageggataac aatttcacac aggaaacagc tatgaccatg attacgccaa gcttggtacc 120 gageteggat ecaetagtaa eggeegeeag tgtgetggaa tteggettgt aatacgaete 180 actatagggc acgcgtggtc cacggcccgg gctggtaact agaagctaaa ggacgacgtc 240 aacataatta aaattactcc aagataatta aaattaaaaa tatcttatat tttatggcgt 300 tacatettee ttteetette ttettttte tgetgegatt tetteecate tatttettet 360 tttactctta tttttttctt tacattgttt agatttgggt aaccaaatct gatttctttc 420 tateqtettt ettetttte tettttttt teegetgega tttettecea ttgtetateg 480 ttttttcctc ttttttttt tacatcgtaa ccaaatctaa aagatcgtat ataaagaatc 540 ttcaaaaaaa aaaattgttt agattggagt agccaaattt aaacaatcgc gtaaaaaaaa 600 taaacqatcq taqacaaatc taaacqatcq tqcacaaaaa qatttaaaaa aatcgtttag 660 tcaaatctaa acaattgtat aaccaaatta aacgatagaa ttgaaataat aaatcggtta 720 gatttggcta tccaaattta aatgaccaaa tctaaacgat cgtataccaa atctaaacga 780 tcgkatacca aatctaaatg atcatgtacc aaatatatta tgcacattgt tggcagggtg 840 qttqacqqaa cattttqtat attttctatt atqqqtttqt aqaatttttt cattttcgaa 900 attgttctat acaatataaa tataaatatt ttaccacttc gttatatttt cgaaaagacc ccttaaataa attgaattcg catataatta aaattttttc ccaaaaaaag tagactatgt 960 1020 ctatctaaaa atttgattcc caatatagaa caaattctca aaatgaacaa acatttgaaa ttctcgatat agaaaacatt tacttatttt gaattgggac atattccaaa gtttattcca 1080 aacgtaactt tgaaggaaaa gttgattgag attacatcca tatttttgtt tttcatattg 1140 1200 aatttcatgg aaaattaaaa tgcacacaaa atgatgtatg agattaaacc aaagtttatc gttattgaat tottttatta aaaaaccaac aaaattttaa aacttgtttg caatagacca 1260 1320 atatagttaa tooatogtgg totattgtag ataaattgta atattttgtt atatttaata 1380 aatattttga tttattttga tatatttgta tttagataac aaaattaaga tttaaatatt 1440 attttatatc ttaatataaa catttqttaa ttttttctat tttagaccat ttctcttatt

<210> 43 <211> 2184

tttatataac attttaataa ctaaatgatg tgacacacac taatattatt tttatccaaa

gaaaataatg ctataaaata tgggtcttct ttatcacctt catgataatt atgaaaaata aaataaaatt taattatata attcatttca tctaatcgta caagctagat attactatat

caacaacttt gtgtataaaa agggcaagaa attaagcatt atcgtgtgag ccactttttc

tatatctaga gatagaaggt ttaaaatcat gtctctaatt ggaaagcttg tgagt

1500

1560

1620

1680

1735

```
<212> DNA
<213> Artificial Sequence
<220>
<223> promoter
<221> misc feature
<222> (1)...(2184)
<223> n = A, T, C or G
<400> 43
                                                                       60
ttgtgtggaa ttgtgagcgg ataacaattt cacacaggaa acagctatga ccatgattac
                                                                      120
gccaagcttg gtaccgagct cggatccact agtaacggcc gccagtgtgc tggaattcgg
                                                                      180
cttactatag ggcacgcgtg gtcgacggcc cgggctggtc caatcaccga acatcatgtt
                                                                      240
atgtaggtgt cgggagatgc tacctatctg ctgatgttgg tttctttctt tgaaagatac
                                                                      300
tctcctgact ttttagttgt tgcatctaga gatgtcctct attattttga caccttttct
                                                                      360
totgacggtg tagagcaaca caaaaaaato ttgaatttot attaatggaa tgagctatat
ctatacaaat tggaaccata tgacaaatta agaagattcc tttctgaata ttatgcaata
                                                                      420
gaaatactca ccaggtgtaa tgatgcacct tatagagaaa acttcgacga acaagagacg
                                                                      480
gctactaagt tttagtagaa tgggtatttc tgacctacta tgtttcagga tgcgaggatc
                                                                      540
                                                                      600
ttcatqqtca attqtqaccq atqqtqqaqa actqaaaata tttcccatct caatqaaata
ctaaaacaac atatcttaga ggttgaacta tttgatatct agggaataca ttttatggga
                                                                      660
                                                                      720
ccgttttcta gttgttccgg caaacacgca ttcgagacgg gacgttcatg tcgcatacca
                                                                      780
cggaggatcc gcatgtaagc tatccaagca atacttctac cctttttgtc ttctttaata
                                                                      840
atatattttt tacttactaa qataqtttct aaatttgttg tagaatcgaa tgctggaact
                                                                      900
teagteetag ettaceteag tgggtaetta gecaetetet ggggaeaaga tatgegagat
                                                                      960
ggcgttggat agacgattgg actactcaaa aggccttggt tggggaccta agtctagggc
                                                                     1020
ccacaagacg gccagtgtga gtagttccac gacctcatgt ttgtagtcca cggtagagct
ccaattatgg actaagcttg atcaagctgt gcaacggatt gaagaacaaa caagaaatca
                                                                     1080
cgatgcgtta gcttcaaaag tggaatgaat gtgaaagttc atagaagaca tgagtcgggc
                                                                     1140
                                                                     1200
acagtaagga ccacaacatt atctttagct ttgcgatacg tatanntatt tccattattc
                                                                     1260
ttaagttttt gaattacagt attcagtgat gatatgcata tatatgtacc aaacgtagcc
acttttqtat aattqtaqqa cctqtqqtqt aqaatqqcat atqaqqctcq ttaaaaqqaca
                                                                     1320
tacgattttc tttgtgcttt ttttaacgag gaatattttt tatttgtatt atgaacttta
                                                                     1380
1440
tattttqtaa tttactaatt tattttaaat tttctttaat tqaatcqata acqaatqcaa
                                                                     1500
                                                                     1560
atattttacq aaaaaaactt ataggaaaat atttcaaaaa aataaaaaat tacatattta
                                                                    1620
aaatattttt cgacgcatta catatgtgga aaatatggtg caaacatcac atcggggatg
                                                                    1680
qttattaccg acgcatgaat gacaccgaat atataaacgt aaggaatagt tattcctgac
gcataactgc tgtcggaact gtggaagtta gttctcgaca ttattaacac ttacqtcgac
                                                                    1740
gtttttatgc atcgggagtc gctccacttc ttgtagtgaa gaaattttgc ctataatgtc
                                                                    1800
ggtttaaaac cgacattaaa ggccaaattt cttctagtgc ataatcaata tmcaaaagtt
                                                                    1860
caattccaaa aattacattt ctctagaaat tccgtgtgaa caattgtcat aaaggtttta
                                                                    1920
                                                                    1980
agtgaattga aaatttcaaa acgtaattgg attaagcgag aaaattattt taatcaccat
                                                                     2040
tcaaaagtta ttaacaatga aaaatatgga agataagatt tcaaaaattac gtaatttact
                                                                    2100
totacgtttc tttctttccc ctttagtaac ttcactcata tctttatata cgttccatcc
cttcacattc tcatacaaaa ttctctttca atatcaactc tcctcttta actcaccctt
                                                                    2160
                                                                    2184
ttttcaaatg gaaacaatgc aaac
<210> 44
<211> 985
<212> DNA
<213> Artificial Sequence
```

<220>

<223> promoter

<400> 44 60 tggaattgtg agcggataac aatttcacac aggaaacagc tatgaccatg attacgccaa 120 qcttqqtacc qagctcggat ccactagtaa cggccgccag tgtgctggaa ttcggcttac 180 tataqqqcac qcqtqqtcqa cgqcccqggc tggtaaattt tgaaaagtta ggagatattt 240 tttacatata agagatattt tttataatgt aacatttttt ttactagacg gttgagtcga 300 gttaggttaa agaaaggaaa actataaaat aatttttaat tattaaatac ataaacaata 360 ctttgtattc tatattaatt aaaatgacta ttgaattgtt aagatgtagg tatctaagga 420 caagaagtct cgagttcaaa tcttcaacct caaaatatac tgcaagatag taactaatga 480 attatatttg actaaatcat gtagcaaaag aaaatcaaat ttatcatgtt aaatatggtc 540 aaqccggagc attaacaaca acaattcata tttgtggttg atagtacttg actagaattt 600 agagagtact tgactagaat aaaaattggg ggacccacta cgacgtcagc ttqccttgct tagcaattaa gctatcacct cttagtctat agcttcgtgc gctgcattaa acggtattct 660 720 cacacttttc ttttcttttt accgcacccg tccggttaat ggctccccca ctttttacct 780 teccequate caeqeeaqtt qeeaacatge qaaqeaqeaa gtacaatatt gteattttge attaaccaaa atgacacgtc ggatgtcatt tatgtaatta agctacaaag ccacggttag 840 tttccgaacc cccacgatcc agtacttacg tgtctcctat aaatcttaga agcaacgtct 900 960 ttaccqqaat caactcatta ggtatcccat tttcatctat caattcaccc ttgaaactgc 985 ttttcccqqc accgactatg gcctc <210> 45 <211> 2455 <212> DNA <213> Artificial Sequence <220> <223> promoter <400> 45 aagcttgcat gcctgcaggt cgactctaga tcaatcaaac atttattaa atagaacgtt 60 120 ttagtggttt ttggatttta tttatctttt ttattattta cattcaattt agatttaact 180 cttgcagaag atggaggaag agaattttta gaaattgaac tgaaatagac ttaattatta 240 aaaatcaaaa gaaaaatggt gccaacaaag gtgactaaga gtgtaatgaa ttggaattag 300 aactttcctt ctqtataqat ataattqatq ttttccttaa ctttattttt atggtggtta 360 tttattaata actgaatttt taagagttct tttaataacc aaatgttata ggattcaatt 420 gattgtttta tgagattagg caaacacttt atattggaga aataatttag tgtagaaagt 480 aattttcatt ttqqattqtt taqatqaaca tcaaatcttq caacaacatt cagttaagta 540 tatataaata tatagagcca ccaacctcaa atacaatatc ttcggaagca aaatattata 600 cataatatgg aaagaagat agtactggta catgaatctt acgaagaatt taagtattat 660 tggcttttcc aatgcagaag tctcaacaaa tcacatttta aaaaccgatt gaataaacat qcaaqtaaga cttttgaaaa aacaagcatt caaacctcat atcaattatc tctatatgca 720 780 aaatgttagg tcaaatgagt aatgaaatta aggacaaatc aactaaaaag aatcaataaa 840 qtqaatcqaa aaqaaacaaa tatcaatcaa acctaatgta tacgtgattg atgatgcagt 900 qtqttttqaq atatqqacat tttqataaac aacaaacctc cactccaata cgagaagaga ggcattgagt gacagattag tgccctattg aagagggtaa gtccaaaaca aaacaaacac 960 1020 aaaacatggt gaagaaatgt tatgaataaa tggcagggaa agacatggtt gtacatgtgg 1080 tgtgagtttt cttctttcaa atctgtgaat aaattggatt acgacccaac aagagaaaca ctqtttqqaa accatgacag ggctacccca tggcgtgaat atcaagtatt taattaatta 1140 ageteteate eccepceatte gtttttttat tegatteata tettatattt tatataegaa 1200 1260 taattcttqa qtttqatttc aatttaqttc qtcaatagta atattttaaa ctatgttaat atataaaaaq taaatqcqaa tgattctatt agtattcact ttatatcact ccttcttaga 1320 1380 gtaaagtttt taaagtggga agggaaatgg aatacgacgt gtgattggta gttaaatttc 1440 cttatcgacg aggttactgt ttccttactt atatatatgg agtcatcctc aatttttcaa 1500 ctctcaactt ccaattatac aagcaaaaca ttcaatacca tacatgcatc tttttagaaa gaaaagaagt tototottgg acttttttt toaattoaac tatgoacctt tgttatttta 1560 1620 qttttataat ttttqttqtt tcttccqttt aatcaagttq ttqtaatcaa ctttattgat 1680 tcaaacacat aqatattttg tttaatagta tcagtatata atagggttag aataaccttt caaatatgtg tttttaaaaa atcaaatcac tttaaaaaatt aaaatatgtt taattagtgt 1740

		. <i>Y</i>	<i>S</i> '			
atgtttttct	ttttaagtat	taaacdacga	taaaaagtgc	tttaacactt	ataaaaaatt	1800
agattaattt	aaaggaagtt	gtctgaacgg	caaaattgac	aaaatataac	aaagtttaat	1860
gaacațtgtt	cgaaatgttt	cgaagaggaa	agaaaacatt	aagtttgaaa	tatctcgagt	1920
taaatacata	tcatccdata	gtaatatata	acaaaacaaa	cttaaatctg	aaaaaaaat	1980
tgatgttaat	aagaaaaaga	gatcaaactc	ttaattttt	aaaaaaataa	tggtgaaaaa	2040
aactgaaaat	tttccaatat	tgtttaattt	caaattgatc	caaaaattaa	agttaaaaaa	2100
gcattaaaca	aaacaattca	aacctagct	actacacatt	tacgaaaata	tatgatacac	2160
aaaggatttt	tgggtgtaaa	catcttttt	attttatata	caccaaactt	cgtatatatt	2220
cacacataaa	gaaggaaaaa	gaattaatgc	aagggtgtgg	ccaattacgt	accgtcgtca	2280
·tatcctactc	atccgttacg	ttctoaaatc	tctctctc	cctgctctcc	taattatttc	2340
tgccagcgac	catatttcat	tttcaattgt	gtgtttaaaa	agccgagaat	cgcaatcctt	2400
tttcctccac	tottaattoa	tttccaattc	acaaaaatag	gatccgccac	catgg	2455